CLAIMS

What is claimed is:

1. A method of task selection comprising the steps of:

assuming a first event in a sequence of events occurs, each event in said sequence of events associated with a plurality of tasks;

determining a first distribution of said plurality of tasks calculated before a first task is selected in association with said first event, said plurality of tasks including said first task;

determining which of said plurality of tasks, said first task, when selected provides a second distribution of said plurality of tasks that is closest to a desired distribution of said plurality of tasks; and

selecting said first task in association with said first event.

2. The method as described in Claim 1, wherein said method comprises the further step of performing said first task when said first event in said sequence of events actually occurs.

3. The method as described in Claim 1, wherein said first event is a customer, said customer visiting a web site over a communication network, and said sequence of events is a sequence of customers visiting said web site.

4. The method as described in Claim 3, wherein said plurality of tasks is a plurality of advertising promotions that individually, when selected by said method, is offered to each customer in said sequence of customers.

5. The method as described in Claim 1, wherein said first distribution is a vector, said vector comprising a plurality of components, said plurality of components associated with said plurality of tasks where each of said plurality of components is associated with a corresponding task in said plurality of tasks, said plurality of components defining the amount of times each of said plurality of tasks has been selected within said sequence of events in relation to the sum of all tasks selected within said sequence of events prior to said first event.

6. The method as described in Claim 1, comprising further steps as follows to determine said second distribution:

calculating a plurality of hypothetical distributions that assumes each of said plurality of tasks is selected, wherein each of said plurality of hypothetical distributions assumes one of said plurality of tasks is selected for performance in association with said first event;

calculating a mathematical distance between each of said plurality of hypothetical distributions and said

desired distribution, creating a plurality of mathematical distances; and

selecting a first mathematical distance from said plurality of mathematical distances that has the least value, said first mathematical distance associated with the selection of said first task in association with said first event and said second distribution.

7. The method as described in Claim 6, wherein said plurality of hypothetical distributions is pre-calculated before said first event occurs.

8. The method as described in Claim 6, wherein each of said plurality of hypothetical distributions is expressed in vector form, said desired distribution is expressed in vector form, and of each said plurality of mathematical distances is a vector norm calculated from the vector difference between each of said plurality of hypothetical distributions and said desired distribution.

9. The method as described in Claim 3, wherein each of said events in said sequence of events is classified within a segment, said segment defining an independent set of characteristics, said segment associated with said plurality of tasks.

10. The method as described in Claim 1, wherein if said first event is the first in said sequence of events,

then said first task has the highest proportionate value in said desired distribution of tasks.

11. A method of selecting an advertising promotion in an advertising campaign over a communication network comprising the steps of:

receiving a customer at a web site;

determining which of a plurality of segments, a first segment, said customer most closely resembles, said first segment further comprising a plurality of advertising promotions;

determining a first distribution of said plurality of advertising promotions, said first distribution calculated before a first advertising promotion is offered to said customer, said plurality of advertising promotions including said first advertising promotion;

determining which of said plurality of advertising promotions, said first advertising promotion, when performed provides a second distribution of said plurality of advertising promotions that provides the least mathematical distance with respect to a desired distribution of said plurality of advertising promotions that is designed to achieve an objective;

selecting said first advertising promotion; and

offering said first advertising promotion to said customer over said communication network.

12. The method as described in Claim 11, wherein each of said plurality of segments define an independent

set of characteristics that profile a particular type of customer.

13. The method as described in Claim 11, wherein said first distribution is a vector, said vector comprising a plurality of components, each of said plurality of components associated with the amount of times one of said plurality of advertising promotions within said segment is offered over said communication network and calculated as a percentage of the sum of all advertising promotions from said plurality of advertising promotions offered over said communication network, said plurality of components corresponding to said plurality of advertising promotions.

14. The method as described in Claim 11, wherein said objective is taken from a group consisting essentially of:

maximizing profits;

acquiring new customers;

generating revenue;

increasing performance of said plurality of tasks; and

reducing inventory.

15. The method as described in Claim 11, comprising further steps as follows to determine said second distribution:

calculating a plurality of hypothetical distributions, each of said plurality of hypothetical distributions calculated by assuming one of said plurality of advertising

promotions is offered to said customer, said plurality of hypothetical distributions including each of said plurality of advertising promotions;

calculating a mathematical distance between each of said plurality of hypothetical distributions and said desired distribution, creating a plurality of mathematical distances; and

selecting a first mathematical distance from said plurality of mathematical distances that has the least value, said first mathematical distance associated with said first advertising promotion and said second distribution.

16. The method as described in Claim 15, wherein said plurality of hypothetical distributions is pre-calculated before said customer is received at said web site.

17. The method as described in Claim 15, wherein each of said plurality of hypothetical distributions is expressed in vector form, said desired distribution is expressed in vector form, and each said plurality of mathematical distances is a first vector norm calculated from the vector difference between each of said plurality of hypothetical distributions and said desired distribution.

18. The method as described in Claim 17, wherein a means for calculating said first vector norm is dynamically

selected from a plurality of means for calculating vector norms depending on conditions experienced at said web site.

19. The method as described in Claim 11, wherein if said customer is the first of a sequence of customers, then said first advertising promotion has the highest proportionate value in said desired distribution of tasks.

20. A computer system comprising:

a bus;

a memory unit coupled to said bus; and

a processor coupled to said bus, said processor for executing a method of selection comprising the steps of:

assuming a first event in a sequence of events occurs, each event in said sequence of events associated with a plurality of tasks;

determining a first distribution of said plurality of tasks calculated before a first task is selected in association with said first event, said plurality of tasks including said first task;

determining which of said plurality of tasks, said first task, when selected provides a second distribution of said plurality of tasks that is closest to a desired distribution of said plurality of tasks that is designed to achieve an objective; and

selecting said first task in association with said first event.

21. The computer system as described in Claim 20, wherein said method comprises the further step of performing said first task when said first event in said sequence of events actually occurs.

22. The computer system as described in Claim 20, wherein in said method said first event is a customer, said customer visiting a web site over a communication network, and said sequence of events is a sequence of customers visiting said web site.

23. The computer system as described in Claim 22, wherein in said method said plurality of tasks is a plurality of advertising promotions that individually, when selected by said method, is offered to each customer in said sequence of customers.

24. The computer system as described in Claim 20, wherein in said method said first distribution is a vector, said vector comprising a plurality of components, said plurality of components associated with said plurality of tasks where each of said plurality of components is associated with a corresponding task in said plurality of tasks, said plurality of components defining the amount of times each of said plurality of tasks has been selected within said sequence of events in relation to the sum of all tasks selected within said sequence of events prior to said first event.

25. The computer system as described in Claim 20, wherein said method comprises further steps as follows to determine said second distribution:

calculating a plurality of hypothetical distributions that assumes each of said plurality of tasks is selected, wherein each of said plurality of hypothetical distributions assumes one of said plurality of tasks is selected for performance in association with said first event;

calculating a mathematical distance between each of said plurality of hypothetical distributions and said desired distribution, creating a plurality of mathematical distances; and

selecting a first mathematical distance from said plurality of mathematical distances that has the least value, said first mathematical distance associated with the selection of said first task in association with said first event and said second distribution.

26. The computer system as described in Claim 25, wherein in said method said plurality of hypothetical distributions is pre-calculated before said first event occurs.

27. The computer system as described in Claim 25, wherein in said method each of said plurality of hypothetical distributions is expressed in vector form, said desired distribution is expressed in vector form, and of each said plurality of mathematical distances is a

vector norm calculated from the vector difference between each of said plurality of hypothetical distributions and said desired distribution.

28. The computer system as described in Claim 20, wherein in said method said objective is to enhance profitability.

29. The computer system as described in Claim 20, wherein in said method if said first event is the first in said sequence of events, then said first task has the highest proportionate value in said desired distribution of tasks.

30. The computer system as described in Claim 20, wherein in said method each of said events in said sequence of events is classified within a segment, said segment defining an independent set of characteristics, said segment associated with said plurality of tasks.